

What is claimed is:

1. A method of displaying a multi-mode stereoscopic image, comprising the steps of:

displaying video signals obtained by photographing an object at a different angle on a display unit;

generating a mode signal for assigning a stereoscopic mode or a plane mode;

separating a picture displayed on the display unit into a left-eye picture and a right-eye picture being incident to the left eye and the right eye of an observer in the stereoscopic mode; and

transmitting the picture displayed on the display unit toward the observer as it is in the plane mode.

2. A multi-mode stereoscopic image displaying apparatus, comprising:

an image signal converter for combining video signals obtained by photographing an object at a different angle;

a light source for generating a light;

a display device for taking advantage of a light inputted from the light source to display the video signals received from the image signal converter; and

a variable color barrier for separating a picture on the display device into a left-eye picture and a right-eye picture in response to first and second voltages set to a different voltage level in a stereoscopic mode while transmitting said picture on the display device as it is in response to a third voltage other than said first and second voltage in a plane mode, said barrier being opposed to the display device and having adjacent pixels

Sub
A1

alternated with each other in such a manner to have a complementary color relationship.

3. The multi-mode stereoscopic image display apparatus according to claim 2, wherein the variable color barrier is arranged at the front side of the display device.

4. The multi-mode stereoscopic image display apparatus according to claim 2, wherein the variable color barrier is arranged between the light source and the display device.

5. The multi-mode stereoscopic image display apparatus according to claim 2, wherein the variable color barrier is a liquid crystal display panel adopting any one of an electrically controlled birefringence (ECB) mode and a guest-host (GH) mode.

6. The multi-mode stereoscopic image display apparatus according to claim 2, further comprising:

a mode conversion controller for receiving a user instruction and generating a mode signal for assigning the stereoscopic mode or the plane mode in accordance with the user instruction;

a voltage source for generating said first, second and third voltages; and

a switch connected between the variable color barrier and the voltage source to apply said first, second and third voltages to the variable color barrier in response to the mode signal.

Sub
A1
Conf

7. A multi-mode stereoscopic image displaying apparatus, comprising:

an image signal converter for combining video signals obtained by photographing an object at a different angle;

a light source for generating a light;

a display device for taking advantage of a light inputted from the light source to display the video signals received from the image signal converter;

a color barrier having adjacent pixels alternated with each other in such a manner to have a complementary color relationship; and

a light-scattering device, being arranged between the display device, for transmitting an incident light as it is, in response to a first voltage in a stereoscopic mode and scattering said incident light in response to a second voltage other than said first voltage in a plane mode.

8. The multi-mode stereoscopic image display apparatus according to claim 7, wherein the light-scattering device includes a polymer-dispersed liquid crystal (PDLC).

9. The multi-mode stereoscopic image display apparatus according to claim 7, further comprising:

a mode conversion controller for receiving a user instruction and generating a mode signal for assigning the stereoscopic mode or the plane mode in accordance with the user instruction;

a voltage source for generating said first and second voltages; and

a switch connected between the variable color barrier and the voltage source to apply said first and second

4055890-012302

Sub
A1
Chit

voltages to the variable color barrier in response to the
mode signal.

Sub
AI
end

20055890-012802